CLAIMS

1. A method for producing bent glass sheets whereby glass sheets are made to run over at least one shaping bed, for bending them, along a path with a curved profile in the run direction of said sheets, said glass sheets having been brought beforehand to their softening temperature, progressively giving them the desired bent shape, characterized in that, between the initial bending phase in which the sheet begins to adopt its shape and the final phase of said bending, continuous blowing of air is performed, at a point on the line along which the sheets run, onto at least one face of the running glass sheets, under conditions capable of asymmetrically influencing the final concavity of the bent glass sheets by comparison with the concavity that the final bending would have given without said blowing.

2. The method as claimed in claim 1, characterized in that the blowing of air onto just one face of the glass sheets is performed in at least one transverse region of these sheets with respect to the axis along which they run.

3. The method as claimed in claim 2, characterized in that the blowing is performed on just one side with respect to the axis along which they run.

4. The method as claimed in claim 2, characterized in that the blowing is performed across the entire transverse region of the glass sheets with respect to the axis along which they run.

5. The method as claimed in claim 1, characterized in that the blowing of air is performed onto both faces of the glass sheets, said blowing not being performed

across the entire transverse region of the glass sheets on at least one of the faces.

6. The method as claimed in claim 5, characterized in that the blowing of air is performed on each side of the glass sheets as they run along and on just one side with respect to the axis along which they run.

7. The method as claimed in one of claims 1 to 6, characterized in that the air blown is cold enough with respect to the bending temperature for the blowing to have an influence on the final bending.

8. The method as claimed in one of claims 1 to 6, characterized in that the air blown is hot enough with respect to the bending temperature for the blowing to have an influence on the final bending.

9. The method as claimed in one of claims 1 to 8, characterized in that air is blown at a temperature other than the temperature at which bending is carried out, the blowing producing an increase in concavity on the same side as the face receiving it if the blowing causes heating, the blowing producing a reduction in concavity on the same side of the face receiving it if the blowing produces cooling.

10. The method as claimed in one of claims 1 to 9, characterized in that air is blown at a temperature other than the temperature at which bending is carried out so as to give further concavity in the plane perpendicular to the direction of travel.

11. The method as claimed in one of claims 1 to 10, characterized in that the blowing is performed by directing air onto the glass sheets at a pressure ranging from 4.90×10^3 to 9.81×10^3 Pa (500 to 1000 mm water column).

AMENDED SHEET

12. The method as claimed in one of claims 1 to 11, characterized in that it leads to bent glass sheets exhibiting variations in dimension ranging from 2/10 mm to 2 mm with respect to bending without blowing.

13. The method as claimed in one of claims 1 to 12, characterized in that the bending is performed with a radius of curvature of a line parallel to the direction of travel ranging from 1 meter to infinity and a radius of curvature of a line perpendicular to the direction of travel ranging from 5 meters to infinity.

14. The method as claimed in one of claims 1 to 13, characterized in that glass sheets which have taken shape at a temperature of 600 to 700°C are moved along.

15. The method as claimed in one of claims 1 to 14, characterized in that sheets of glass are made to run in a planar trajectory through a reheat furnace in order to bring them to the softening point, then in a trajectory with a curved profile tangential to the aforementioned planar trajectory over a shaping bed consisting of shaping rods, the blowing being performed at a point situated along the curved-profile trajectory after the sheets have begun to take shape.

16. The method as claimed in one of claims 1 to 15, characterized in that the shape is given to the glass sheets by performing sag bending, then bending is continued in a trajectory with a curved profile over a shaping bed consisting of shaping rods, blowing being performed along said curved-profile trajectory.

17. The method as claimed in one of claims 1 to 16, characterized in that the glass sheets are subjected to toughening downstream of the blowing operation and before the end of the bending.

18. The method as claimed in claim 17, characterized in that the toughening is performed by directing air at a pressure ranging from 2.94×10^4 Pa to 3.43×10^4 Pa (3000 to 3500 mm water column).

19. Bent glass sheets obtained or likely to be obtained by the method as defined in one of claims 1 to 18.

20. Bent glass sheets exhibiting asymmetry likely to be detected by polariscopy or by measuring stress by using techniques employing an epibiascope.

21. The sheets as claimed in the preceding claim exhibiting at least one straight line that can be detected by polariscopy or using a biasgraph, more or less parallel to one of the edges of the sheet and closer to this edge than to the other edge more or less parallel to it.

22. A machine for bending glass sheets comprising means for moving along glass sheets (1) which have been raised beforehand to their softening point, giving them the desired bent shape, characterized in that this machine further comprises at least one nozzle (3, 3a) for blowing air continuously, this nozzle being arranged at a point on the line along which the sheets run after the sheets have began to take shape and before the final phase of said bending, the nozzle or nozzles (3; 3a) being arranged in such a way as to blow air asymmetrically onto said sheets (1), and set up so that said air blowing influences the final concavity of the bent glass sheets by comparison with the concavity that the final bending would have given without said blowing.

23. The bending machine as claimed in the preceding claim, characterized in that it comprises a shaping bed consisting of shaping rods (2) in a path with a curved profile, the asymmetric blowing nozzle or nozzles being aimed between two adjacent shaping rods (2) of the shaping bed.

24. The bending machine as claimed in one of claims 22 and 23 characterized in that it further comprises blowing plenums for toughening, downstream of the asymmetric blowing nozzle or nozzles, said blowing plenums for toughening each comprising nozzles (4) arranged in arrays and aimed between two adjacent shaping rods (2) of the shaping bed.